

RECORDATION FORM COVER SHEET

PATENTS ONLY

Our Ref.: 39-219

Commissioner of Patents and Trademarks
Assignment, Washington, D.C. 20231

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies): Michael J. Ernes Ian J. Tetlow Caroline G. Bowsher</p> <p>Additional name/s of conveying party/ies attached? <input type="checkbox"/></p> <p>3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Assignment <input type="checkbox"/> Change of Name <input type="checkbox"/> Other</p> <p>Execution Date: <u>September 15, 2000</u></p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: <u>THE VICTORIA UNIVERSITY OF MANCHESTER</u></p> <p>Internal Address: _____</p> <p>Street Address: <u>Oxford Road</u></p> <p>City: <u>Manchester</u></p> <p>State/Country: <u>United Kingdom</u></p> <p>Zip: <u>M13 9PL</u></p> <p>Additional name/s & address/es attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
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<p>4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: _____</p> <table border="0"><tr><td style="vertical-align: top;"><p>A. Patent Application No(s). (1) <u>09/646,532</u> (2) _____ (3) _____</p></td><td style="vertical-align: top;"><p>B. Patent No(s). (1) _____ (2) _____ (3) _____</p></td></tr></table> <p>Additional numbers attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		<p>A. Patent Application No(s). (1) <u>09/646,532</u> (2) _____ (3) _____</p>	<p>B. Patent No(s). (1) _____ (2) _____ (3) _____</p>
<p>A. Patent Application No(s). (1) <u>09/646,532</u> (2) _____ (3) _____</p>	<p>B. Patent No(s). (1) _____ (2) _____ (3) _____</p>		

<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>Mary J. Wilson</u></p> <p>Internal Address: _____</p> <p>Street Address: <u>Nixon & Vanderhye P.C.</u> <u>1100 North Glebe Road</u> <u>8th Floor</u></p> <p>City: <u>Arlington</u> State: <u>VA</u> Zip: <u>22201</u></p>	<p>6. Total number of applications & patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41) \$ <u>40.00</u> <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account #14-1140</p> <p>8. The Commissioner is hereby authorized to charge any <u>deficiency</u> in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our <u>Account No. 14-1140</u>.</p>
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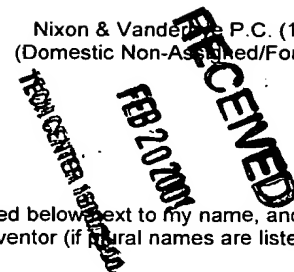
DO NOT USE THIS SPACE

<p>9. Statements and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</p>		
<p><u>Mary J. Wilson</u> Name of Person Signing Reg. No. 32,955</p>	<p><u>B. J. Wilson Reg No 3663</u> Signature</p>	<p><u>October 3, 2000</u> Date</p>
<p>Total number of pages including original cover sheet, attachments, and document: <u>[3]</u></p>		

COPY



Nixon & Vanderhye P.C. (10/99)
(Domestic Non-Assigned/Foreign)



RULE 63,(37 C.F.R. 1.63)
DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, and I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

TRANSPORTER PROTEIN

the specification of which (check applicable box(s)):

- ☐ is attached hereto
☐ was filed on _____ as U.S. Application Serial No. 09/646,532 (Atty Dkt. No. 39-219)
☐ was filed as PCT International application No. PCT/GB99/00727 on 19 March 1999
and (if applicable to U.S. or PCT application) was amended on 16 June 2000

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. 1.56. I hereby claim foreign priority benefits under 35 U.S.C. 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed or, if no priority is claimed, before the filing date of this application:

Priority Foreign Application(s):

Application Number	Country	Day/Month/Year Filed
9805939.7	Great Britain	20 March 1998

I hereby claim the benefit under 35 U.S.C. §11 9(e) of any United States provisional application(s) listed below.

Application Number	Date/Month/Year Filed
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I hereby claim the benefit under 35 U.S.C. 120/365 of all prior United States and PCT international applications listed above or below and, insofar as the subject matter of each of the claims of this application is not disclosed in such prior applications in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. 1.56 which occurred between the filing date of the prior applications and the national or PCT international filing date of this application:

Prior U.S.13CT Application(s):

Application Serial No.	Day/Month/Year Filed	Status: patented pending, abandoned
PCT/GB99/00727	19 March 1999	

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. And on behalf of the owner(s) hereof, I hereby appoint NIXON & VANDERHYE P.C., 1100 North Glebe Rd., 8th Floor, Arlington, VA 22201-4714, telephone number (703) 816-4000 (to whom all communications are to be directed), and the following attorneys thereof (of the same address) individually and collectively owner's/owners' attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith and with the resulting patent: Arthur R. Crawford, 25327; Larry S. Nixon, 25640; Robert A. Vanderhye, 27076; James T. Hosmer, 30184; Robert W. Faris, 31352; Richard G. Besha, 22770; Mark E. Nusbaum, 32348; Michael J. Keenan, 32106; Bryan H. Davidson, 30251; Stanley C. Spooner, 27393; Leonard C. Mitchard, 29009; Duane M. Byers, 33363; Jeffrey H. Nelson, 30481; John R. Lastova, 33149; H. Warren Burnam, Jr. 29366; Thomas E. Byrne, 32205; Mary J. Wilson, 32955; J. Scott Davidson, 33489; Alan M. Kagen, 36178; Robert A. Molan, 29834; B. J. Sadoff, 36663; James D. Berquist, 34776; Updeep S. Gill, 37334; Michael J. Shea, 34725; Donald L. Jackson, 41090; Michelle N. Lester, 32331; Frank P. Presta, 19828; Joseph S. Presta, 35329; Joseph A. Rhoads, 37515; Raymond Y. Mah, 41426. I also authorize Nixon & Vanderhye to delete any attorney names/numbers no longer with the firm and to act and rely solely on instructions directly communicated from the person, assignee, attorney, firm, or other organization sending instructions to Nixon & Vanderhye on behalf of the owner(s).

- Inventor's Signature: M. Jones Date: 12/10/00
Inventor: MICHAEL J EMES BRITISH
(first) MI (last) (citizenship)
Residence: (city) Stockport (state/country) United Kingdom
Post Office Address: 19 Odgen Road, Bramhall, Stockport, United Kingdom
(Zip Code) SK7 1HJ
- Inventor's Signature: I. Tetlow Date: 12/10/00
Inventor: IAN J TETLOW BRITISH
(first) MI (last) (citizenship)
Residence: (city) Rochdale (state/country) United Kingdom
Post Office Address: 16 Thames Road, Milnrow, Rochdale, United Kingdom
(Zip Code) OL16
- Inventor's Signature: C. Bowshe Date: 12/10/00
Inventor: CAROLINE G BOWSHER BRITISH
(first) MI (last) (citizenship)
Residence: (city) Cheshire (state/country) United Kingdom
Post Office Address: 9 Gloucester Drive, Sale, Cheshire, United Kingdom
(Zip Code) M33 5DH

FOR ADDITIONAL INVENTORS, check box ☐ and attach sheet with same information and signature and date for each.

Applicant or Patentee: Michael James Emes, Ian Joseph Tetlow, and Caroline Grace Bowsher
Attorney's Docket No. 219
Serial or Patent No: _____
Filed or Issued: _____
For: _____

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
STATUS (37 CFR 1.9 (f) and 1.27 (b)) - INDEPENDENT INVENTOR**

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9 (c) for purposes of paying reduced fees under section 41 (a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled Transporter Protein described in.

☐ the specification filed herewith
☐ application serial no. _____, filed _____
☐ patent no. _____, issued _____

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9 (c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9 (d) or a nonprofit organization under 37 CFR 1.9 (e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

☐ no such person, concern, or organization
☒ persons, concerns or organizations listed below*.

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

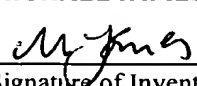
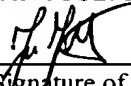
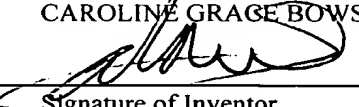
FULL NAME MICHAEL JAMES EMES
ADDRESS 19 ODGEN ROAD, BRAMHALL, STOCKPORT, SK7 1HJ, UNITED KINGDOM
(X) INDIVIDUAL () SMALL BUSINESS CONCERN () NONPROFIT ORGANIZATION

FULL NAME IAN JOSEPH TETLOW
ADDRESS 16 THAMES ROAD, MILNROW, ROCHDALE, OL16, UNITED KINGDOM
(X) INDIVIDUAL () SMALL BUSINESS CONCERN () NONPROFIT ORGANIZATION

FULL NAME CAROLINE GRACE BOWSHER
ADDRESS 9 GLOUCESTER DRIVE, SALE, CHESHIRE, M33 5DH, UNITED KINGDOM
(X) INDIVIDUAL () SMALL BUSINESS CONCERN () NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

MICHAEL JAMES EMES	IAN JOSEPH TETLOW	CAROLINE GRACE BOWSHER
		
Signature of Inventor	Signature of Inventor	Signature of Inventor
<u>15/9/00</u>	<u>15/9/00</u>	<u>15th of September 2000</u>
Date	Date	Date

Form PTO-FB-A410 (8-83)

Applicant or Patentee: Michael James Emes, Ian Joseph Tetlow, and Caroline Grace Bowsher
Attorney's Docket No.: 39-219
Serial or Patent No: _____
Filed or Issued: _____
For: _____

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
STATUS (37 CFR 1.9 (f) and 1.27 (d)) - NONPROFIT ORGANIZATION**

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF ORGANIZATION THE VICTORIA UNIVERSITY OF MANCHESTER
ADDRESS OF ORGANIZATION OXFORD ROAD, MANCHESTER, M13 9PL, UNITED KINGDOM

TYPE OR ORGANIZATION

- ☒ University or other institution of higher education
☐ Tax exempt under Internal Revenue Service Code (26 USC 501(a) and 501(c) (3))
☐ Nonprofit scientific or educational under statute of state of The United States of America
(Name of state _____)
(Citation of statute _____)
☐ Would qualify as tax exempt under Internal Revenue Service Code (26 USC 501(a) and 501(c) (3)) if
located in The United States of America
☐ Would qualify as nonprofit scientific or educational under statute of state of The United States of
America if located in The United States of America
(Name of state _____)
(Citation of statute _____)

I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as defined
in 37 CFR 1.9 (e) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States
Code with regard to the invention entitled _____ by
inventor(s) _____ described in

- ☐ the specification filed herewith
☒ application serial no. _____, filed _____
☐ patent no. _____, issued _____

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit
organization with regard to the above identified invention.

If the rights held by the nonprofit organization are not exclusive, each individual, concern or organization
having rights to the invention is listed below* and no rights to the invention are held by any person, other than
the inventor, who could not qualify as a small business concern under 37 CFR 1.9 (d) or by any concern which
would not qualify as a small business concern under 37 CFR 1.9 (d) or a nonprofit organization under 37 CFR
1.9 (e).

*NOTE: Separate verified statements are required from each named person, concern or organization
having rights to the invention averring to their status as small entities. (37 CFR 1.27).

NAME Neil Ferguson NEIL FERGUSON
ADDRESS RGS4 UNIVERSITY OF MANCHESTER, MANCHESTER M13 9PL, UK,
() INDIVIDUAL () SMALL BUSINESS CONCERN (X) NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING NEIL FERGUSON
TITLE IN ORGANIZATION HEAD, RGSU
ADDRESS OF PERSON SIGNING RGSU, UNIVERSITY OF MANCHESTER,
OXFORD ROAD MANCHESTER M13 9PL, UK
SIGNATURE Neil Ferguson DATE 5 SEPT 2000

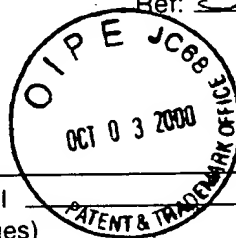
Form PTO-FB-A440 (8-83)



RECEIVED
OCT 20 2000
PATENT & TRADEMARK OFFICE

Serial No.: 09/640,532
Applicant: EMES et al
Title: ADP-GLUCOSE TRANSPORTER
OF THE AMYLOPLAST
Atty: MJW
Date: 10-3-2000
Client: MARIS + CLERK
Ref: 39-219

____ Amendment
____ Pages Specification
____ Claims
____ Sheets Drawings: Formal



____ Informal
☒ Declaration (1 Pages)
☒ Assignment + Recordation Form Cover Sheet
____ Priority Document
____ Base Issue Fee Transmittal
\$40.00 Fee (Check) Recordation Fee

Other: TRANSMITTAL LETTER FILING COMPLETION
SUBMISSION AND REFUND REQUEST + VERIFIED
STATEMENTS CLAIMING SMALL ENTITY (2)

**RULE 63 (37 C.F.R. 1.63)
DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, and I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

TRANSPORTER PROTEIN

the specification of which (check applicable box(s)):

- ☐ is attached hereto
☐ was filed on _____ as U.S. Application Serial No. _____ (Atty Dkt. No. 39-219)
☒ was filed as PCT International application No. PCT/GB99/00727 on 19th March 1999
and (if applicable to U.S. or PCT application) was amended on _____

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. 1.56. I hereby claim foreign priority benefits under 35 U.S.C. 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed or, if no priority is claimed, before the filing date of this application:

Priority Foreign Application(s):

Application Number	Country	Day/Month/Year Filed
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I hereby claim the benefit under 35 U.S.C. §11 9(e) of any United States provisional application(s) listed below.

Application Number	Date/Month/Year Filed
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I hereby claim the benefit under 35 U.S.C. 120/365 of all prior United States and PCT international applications listed above or below and, insofar as the subject matter of each of the claims of this application is not disclosed in such prior applications in the manner provided by the first paragraph 35 U.S.C. 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. 1.56 which occurred between the filing date of the prior applications and the national or PCT international filing date of this application:

Prior U.S. 13CT Application(s):

Application Serial No.	Day/Month/Year Filed	Status: patented pending, abandoned
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. And on behalf of the owner(s) hereof, I hereby appoint **NIXON & VANDERHYE P.C., 1100 North Glebe Rd., 8th Floor, Arlington, VA 22201-4714, telephone number (703) 816-4000 (to whom all communications are to be directed)**, and the following attorneys thereof (of the same address) individually and collectively owner's/owners' attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith and with the resulting patent: Arthur R. Crawford, 25327; Larry S. Nixon, 25640; Robert A. Vanderhye, 27076; James T. Hosmer, 30184; Robert W. Faris, 31352; Richard G. Besha, 22770; Mark E. Nusbaum, 32348; Michael J. Keenan, 32106; Bryan H. Davidson, 30251; Stanley C. Spooner, 27393; Leonard C. Mitchard, 29009; Duane M. Byers, 33363; Jeffrey H. Nelson, 30481; John R. Lastova, 33149; H. Warren Burnam, Jr. 29366; Thomas E. Byrne, 32205; Mary J. Wilson, 32955; J. Scott Davidson, 33489; Alan M. Kagen, 36178; Robert A. Molan, 29834; B. J. Sadoff, 36663; James D. Berquist, 34776; Updeep S. Gill, 37334; Michael J. Shea, 34725; Donald L. Jackson, 41090; Michelle N. Lester, 32331; Frank P. Presta, 19828; Joseph S. Presta, 35329; Joseph A. Rhoads, 37515 I also authorize Nixon & Vanderhye to delete any attorney names/numbers no longer with the firm and to act and rely solely on instructions directly communicated from the person, assignee, attorney, firm, or other organization sending instructions to Nixon & Vanderhye on behalf of the owner(s).

- Inventor's Signature: *Michael James Emes* Date: 15/9/00
Inventor: MICHAEL J EMES BRITISH
(first) (last) (citizenship)

Residence: (city) Stockport (state/country) United Kingdom
Post Office Address: 19 Odgen Road, Bramhall
(Zip Code) SK7 1HJ
- Inventor's Signature: *Ian Tetlow* Date: 15/9/00
Inventor: IAN J TETLOW BRITISH
(first) (last) (citizenship)

Residence: (city) Rochdale (state/country) United Kingdom
Post Office Address: 16 Thames Road, Milnrow
(Zip Code) OL16
- Inventor's Signature: *Caroline Bowers* Date: 15th September 2000
Inventor: CAROLINE G BOWSER BRITISH
(first) (last) (citizenship)

Residence: (city) Cheshire (state/country) United Kingdom
Post Office Address: 9 Gloucester Drive, Sale
(Zip Code) M33 5DH

FOR ADDITIONAL INVENTORS, check box ☐ and attach sheet with same information and signature and date for each.



Lips

for which Assignors have made or will make application for Letters Patent of the United States; and

desires to acquire _____ the entire right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and in, to and under said application, and in, to and under any and all Letters Patent, United States and foreign, which may be obtained therefor and thereon:

NOW THEREFORE. To All Whom It May Concern, be it known that for and in consideration of the sum of One (\$1.00) Dollar and other good, valuable and sufficient considerations to Assignors in hand paid, the receipt of which is hereby acknowledged. Assignors have sold, assigned and transferred, and by these presents does sell, assign and transfer unto Assignee, _____ the entire right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and in, to and under said application for United States Letters Patent executed by Michael James Emes this 15th day of September, 2000, and by Ian Joseph Tellow this 15th day of September, 2000, and by Caroline Grace Bowsher this 15th day of September, 2000, and any and all other applications thereon and arising therefrom, including any and all divisions and continuations thereof, and any and all patents to be issued and obtained therefor and thereon, United States and foreign, including all reissues and extensions thereof.

Assignors hereby authorize and request the firm of Nixon & Vanderhye P.C., 1100 North Glebe Road, 8th Floor, Arlington, VA 22201-4714, U.S.A. to insert here in parentheses (Serial No. _____, Filed _____) the date and serial number of said application when officially known, and Assignors hereby authorize and request the Honorable Commissioner of Patents and Trademarks to issue said letters Patent to Assignee, its assigns and legal representatives.

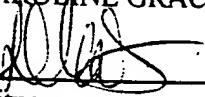
Assignors agree to sign and execute any and all other papers necessary or desirable for the procurement of Letters Patent on said invention in this and all foreign countries for the use of Assignee.

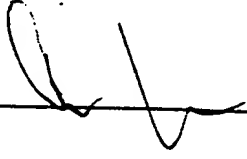
Witness

BOOK

Signed at 16.04 on 15th Sept 2000


CAROLINE GRACE BOWSHER


Witness


Witness

COPY